

REMARKS

Claims 1– 8 are currently pending in the application.

Claims 2-6 were identified as being drawn to allowable subject matter.

Accordingly, claims 2 and 3 have been amended to independent form, and now incorporate the features of independent claim 1. A check in the amount of \$172 is attached to satisfy the extra claims fee. If any additional fees are required for entry of this amendment, the Commissioner is authorized to charge attorney's deposit account 50-2041 (Whitham, Curtis & Christofferson, P.C.). In view of this, claims 2-6 are now in *prima facie* condition for allowance.

Claim 1 has been amended to highlight the commodity management radio communicating apparatus of the present invention in which plural portable radio communication terminals in a commodity management system manage commodities by communicating with an inventory controller via a radio communication base station. Claims 7 and 8 specifically reference the commodity management radio communication apparatus and the plural portable radio communication terminals being referenced in the fault monitoring program (claim 8) on the storage medium (claim 7). Additionally, in order to clarify the features of the present invention Applicant highlights that the claimed method deals with arbitrary or problematic terminals which have retried several times to establish a radio communication to the radio communication base station and need to be tested. Note that other portable radio terminals may not have a problem in establishing communication and are not the subject of the present testing  method.

Spelling and grammatical errors have been corrected throughout the specification in accordance with the Examiner's comments in the Office Action. No new matter has been added.

Claims 1, 7, and 8 have been rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,917,433 to Keillor et al. in view of U.S. Patent No. 6,223,032 to Cuffaro. This rejection is respectfully traversed for the reasons that (1) Keillor et al. and Cuffaro concern different fields of invention, both from each other and from the claimed invention, and the combination would not be made by one of ordinary skill in

Cuffaro were made, the combined entity would not result in or make obvious the claimed invention.

The claimed invention concerns a fault-monitoring method for use in radio-based commodity management systems for use in retail stores and other environments, where the item to be tracked remains within a place of business, as well as a storage medium for use in conjunction with such systems. The claimed invention enables automated fault monitoring when the system is in normal operation, while the prior art permitted fault monitoring is to be conducted only by specialized personnel and only when the system had been taken out of normal operation. Claim 1, as amended, now requires "providing a commodity management radio communicating apparatus in which a plurality of portable radio communication terminals in a commodity management system, each of each manages commodities by communicating with an inventory controller via a radio communication base station automatically executing a test of a radio communication section in arbitrary portable radio communication terminal when a number of retrying times of radio communication between said arbitrary portable radio communication terminals and said radio communication base station exceeds a predetermined number of times:" in the claimed method. Claims 7 and 8 specifically reference the commodity management radio communication apparatus and the plurality of portable radio communication terminals being referenced in the fault monitoring program (claim 8) on the storage medium (claim 7).

Keillor et al., by contrast, concerns an asset monitoring system and associated method for monitoring the location of containers for transporting goods, such as semi trailers, shipping containers, rail cars or similar assets, where the item to be tracked does not remain within a place of business. Unlike the claimed invention, one feature of Keillor et al. is the use of distinct operational modes, with one mode to be used when the container is "tethered" (such as when a trailer is hitched to a tractor to form a tractor-trailer rig) and another mode is used when the container is "untethered" (such as when a trailer is unhitched from its tractor and stored in a lot). The use of an untethered mode of operation in Keillor et al. enables the tracking of containers not currently en route, which were simply dropped from monitoring in systems before

Keillor et al. Furthermore, as the Examiner notes in the Office Action, Keillor et al. does not discuss automated fault monitoring.

Recognizing in the Office Action that Keillor et al. does not address automated fault monitoring, the Examiner relies on Cuffaro to provide the missing features. Cuffaro, however, does not relate either to commodity management (as does the claimed invention) or to asset monitoring (as does Keillor et al.) but instead relates to the identification and possible shutting down of cellular telephone or other mobile communication stations when the signal becomes too weak or the authenticity of the identification response code is in doubt. It would thus not be obvious to one of ordinary skill in the art to combine Keillor and Cuffaro in the manner proposed (i.e., the references solve different problems from each other and the problems they solve are different from the claimed invention). Furthermore, because neither Keillor nor Cuffaro pertain to a commodity management system, no combination of Keillor and Cuffaro would make the claimed invention obvious. That is, the detection of errors indicative of a faulty operation of a mobile station (cited as being shown in Cuffaro in column 1, lines 57-67) has nothing to do with a commodity management radio communicating apparatus in which plural portable radio communication terminals in a commodity management system for managing commodities by communication with an inventory controller via a radio base station, as is recited in claims 1, 7 and 8. Hence, Cuffaro does not make up for the deficiencies of Keillor.

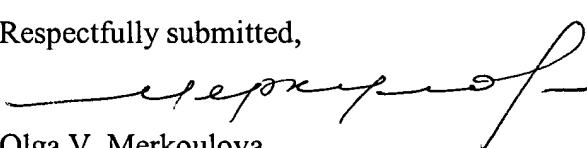
Although not discussed by the Examiner, seven additional U.S. Patents are cited by the Examiner as prior art of record "with respect to methods and apparatuses to provide information about faulty signals or defective devices." These references do not, however, concern fault-monitoring methods for commodity management systems but instead relate to operating various types of wireless telecommunications systems. U.S. Patent No. 5, 752,165 to Hokkanen concerns a method and apparatus for testing the operation of a radio receiver unit during normal traffic and specifically refers to monitoring the operation of a receiver in a cellular radio system. U.S. Patent No. 6,169,883 to Vimpari et al. concerns the remote testing of subscriber connections in a system implementing a wireless subscriber connection, with specific reference to telephone systems. U.S. Patent No. 6,215,997 to Han concerns a technique for

reporting faults of a base station of a code division multiple access communications system to an upper base station management unit. U.S. Patent No. 6,070,091 to Hogevik concerns a method for detecting performance degradation in radio base stations of wireless telecommunications systems, which may occur as a result of interference by intermodulation products with the operation of transceivers. U.S. Patent No. 6,389,281 to Lee concerns a method for automatically testing a base transceiver station in a mobile telecommunication system, with specific reference to code division multiple access systems comprising a plurality of mobile stations. U.S. Patent No. 5,201,063 to Tam et al. concerns the setting of circuits in electronic equipment, with specific reference to mobile telephones in cellular mobile telephone systems. Finally, U.S. Patent No. 4,622,438 to Shimizu et al. concerns a multiple access radio telephone system having an automatic response unit suitable for a loopback test.

In view of the foregoing, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed.

Applicant hereby makes a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041 (Whitham, Curtis & Christofferson).

Respectfully submitted,


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